

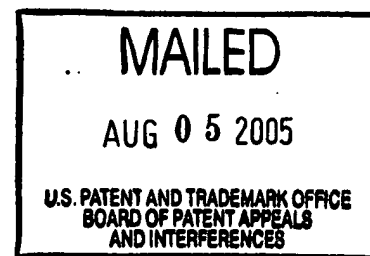
UNITED STATES PATENT AND TRADEMARK OFFICE

**BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES**

Ex parte JACOBUS W. VALLEN

Appeal No. 2005-1489
Application No. 09/224,913

ON BRIEF



Before JERRY SMITH, RUGGIERO, and BARRY, *Administrative Patent Judges*.
BARRY, *Administrative Patent Judge*.

A patent examiner rejected claims 3-5. The appellant appeals therefrom under 35 U.S.C. § 134(a). We remanded. *Ex parte Vallen*, No. 2002-0516 (Bd.Pat.App. & Int. Jan. 15, 2004). The examiner maintained his rejection of claims 3-5; the appellant maintained his appeal. We reverse.

I. BACKGROUND

The invention at issue on appeal concerns an electric ballast used to ignite and operate a high-pressure mercury discharge lamp. (Spec. at 4.) According to the appellant, the base and the "lamellae" of a known ballast are manufactured in a single piece. (*Id.* at 1.) After providing coil windings, the lamellae are turned over and

secured with a free end to the base so as to enclose the windings. Turning over the lamellae requires the presence of folding seams at the location where the lamellae meet the base, which the appellant asserts, "constitutes a drawback." (*Id.*)

Because the appellant's ballast features a separate base and cover to enclose coil windings, folding seams in the base are unnecessary. Consequently, the base and the cover may be manufactured from different types of resin. (*Id.*) A further understanding of the invention can be achieved by reading the following claim.

5. An electric ballast comprising an electric coil with coil windings having a width d which are wound on a synthetic resin coil base (10) including a box-like base part comprising four faces arranged so as to form a rectangle for accommodating a metal core, said base part being provided on either side with mutually parallel flanges (121, 122) limiting the width d of the coil windings, characterized in that:

(i) the coil base (10) is provided with a connection member (250) for engaging an external electrical connector;

(ii) the ballast further comprises a separate insulating synthetic resin cover (20) which includes as a part thereof an external insulator (25) which engages said connection member (250) of the coil base (10); and

(iii) the cover (20) engages the coil base (10) and cooperates therewith to substantially completely enclose the coil windings.

Claims 3-5 stand rejected under 35 U.S.C. § 112, ¶ 2, as indefinite. Claims 3 and 5 stand rejected under 35 U.S.C. § 103(a) as obvious over U.S. Patent

No. 4,291,292 ("Witchger") and U.S. Patent No. 5,153,550 ("Sugiura"). Claim 4 stands rejected under § 103(a) as obvious over Witchger, Sugiura, and U.S. Patent No. 4,363,014 ("Leach").

II. OPINION

Our opinion addresses the rejections in the following order:

- indefiniteness rejection
- obviousness rejections.

A. INDEFINITENESS REJECTION

Rather than reiterate the positions of the examiner or the appellant *in toto*, we address the point of contention therebetween. The examiner asserts, "the 'substantially' term rejection under 112 second paragraph is maintained because, the term 'substantially' is not defined by the claim, the specification does not provide a standard for ascertaining the requisite degree, and one of ordinary skill in the art would not be reasonably apprised of the scope of the invention." (Examiner's Answer¹ at 7.) The appellant argues, "[t]he purpose of the term 'substantially' is to ensure that small,

¹We rely on and refer to the Substitute Examiner's Answer (Apr. 9, 2004) in lieu of the original Examiner's Answer (May 23, 2001) because the latter was defective. *Vallen* at 2-3. The original Examiner's Answer was not considered in deciding this appeal.

inconsequential gaps in the coil enclosing function by a potential infringer do not avoid the patent, while the infringer achieves the advantages thereof." (Br.² at 7-8.)

"The test for definiteness is whether one skilled in the art would understand the bounds of the claim when read in light of the specification." *Miles Labs., Inc. v. Shandon Inc.*, 997 F.2d 870, 875, 27 USPQ2d 1123, 1126 (Fed. Cir. 1993) (citing *Orthokinetics Inc., v. Safety Travel Chairs, Inc.*, 806 F.2d 1565, 1576, 1 USPQ2d 1081, 1088 (Fed. Cir. 1986)). Here, claim 5 recites in pertinent part the following limitations: "the cover (20) engages the coil base (10) and cooperates therewith to **substantially** completely enclose the coil windings." (Emphasis added.) Claim 3 recites similar limitations.

"[T]he use of modifiers in the claim, like 'generally' and 'substantial,' does not by itself render the claims indefinite." *Energy Absorption Sys., Inc. v. Roadway Safety Servs., Inc.*, No. 96-1264, 1997 WL 368379, at *4 (Fed. Cir. 1997) (citing *Seattle Box*

²In our remand, we directed the appellant that "any subsequent brief submitted by the appellant should be self-contained with respect to all arguments. No prior briefs should be referenced or incorporated therein." *Vallen*, at 3. The appellant filed a subsequent brief, a "Supplemental Reply Brief," on May 10, 2004. In accordance with our directions, we rely on and refer to that Reply Brief in lieu of a prior "Reply Brief," filed on July 12, 2001, and an "Appeal Brief," filed on January 9, 2001. Neither the prior Reply Brief nor the Appeal Brief was considered in deciding this appeal.

Co. v. Indus. Crating & Packing, Inc., 731 F.2d 818 828-29, 221 USPQ 568, 575-76 (Fed. Cir.1984)). "The general rule is, of course, that terms in the claim are to be given their ordinary and accustomed meaning." *Johnson Worldwide Assocs., Inc. v. Zebco Corp.*, 175 F.3d 985, 989, 50 USPQ2d 1607, 1610 (Fed. Cir. 1999) (citing *Renishaw PLC v. Marposs Societa Per Azioni*, 158 F.3d 1243, 1249, 48 USPQ2d 1117, 1121 (Fed. Cir. 1998); *York Prods., Inc. v. Central Tractor Farm & Family Ctr.*, 99 F.3d 1568, 1572, 40 USPQ2d 1619, 1622 (Fed. Cir. 1996)). "Ordinarily . . . 'substantially' means 'considerable in . . . extent,' . . . or 'largely but not wholly that which is specified.'" *York Prods., Inc. v. Cent. Tractor Farm & Family Ctr.*, 99 F.3d 1568, 1572-73, 40 USPQ2d 1619, 1623 (Fed. Cir. 1996) (quoting *American Heritage Dictionary* (2d College ed. 1982), *Webster's Ninth New Collegiate Dictionary* 1176 (9th ed. 1983)).

Giving the term "substantially" its ordinary meaning, we are persuaded that one skilled in the art would understand that the cover (20) and the coil base (10), together, enclose most or all of the coil windings. Therefore, we reverse the indefiniteness rejection of claims 3-5.

B. OBVIOUSNESS REJECTIONS

Admitting that "Witchger discloses the instant claimed invention except for a connection member being integrally formed with one of the bobbin flanges," (Examiner's Answer at 5), the examiner concludes, "[i]t would have been obvious to one having ordinary skill in the art at the time the invention was made to mount the external connection members of Witchger on the flange of the bobbin, as suggested by Sugiura et al., for the purpose of facilitating connections of the leads and placement of the cover." (*Id.*) The appellant argues, "the examiner's proposed modification of the Witchger device would not in fact facilitate connections of the leads and placement of the cover." (Br. at 10.)

In addressing the point of contention, the Board conducts a two-step analysis. First, we construe the independent claim at issue to determine its scope. Second, we determine whether the construed claim would have been obvious.

a. Claim Construction

"Analysis begins with a key legal question -- *what is the invention claimed?*" *Panduit Corp. v. Dennison Mfg. Co.*, 810 F.2d 1561, 1567, 1 USPQ2d 1593, 1597 (Fed. Cir. 1987). Here, claim 5 specifies in pertinent part the following limitations: "the coil base (10) is provided with a connection member (250) for engaging an external

electrical connector. . . ." The examiner's aforementioned interpretation of the limitations as requiring "a connection member being integrally formed with one of the bobbin flanges," (Examiner's Answer at 5), is uncontested. "The appellant's [s]ilence implies assent.'" *Ex parte Knapton*, 67 USPQ2d 1059, 1060 (Bd.Pat.App. & Int. 2002) (quoting *Harper & Row Publishers, Inc. v. Nation Enters.*, 471 U.S. 539, 572, 225 USPQ 1073, 1085 (1985)). Therefore, the limitations require that a connection member for engaging an external electrical connector be integrally formed with a flange of a bobbin.

b. Obviousness Determination

Having determined what subject matter is being claimed, the next inquiry is whether the subject matter would have been obvious. "[T]o establish obviousness based on a combination of the elements disclosed in the prior art, there must be some motivation, suggestion or teaching of the desirability of making the specific combination that was made by the applicants." *In re Kotzab*, 217 F.3d 1365, 1370, 55 USPQ2d 1313, 1316 (Fed. Cir. 2000) (citing *In re Dance*, 160 F.3d 1339, 1343, 48 USPQ2d 1635, 1637 (Fed. Cir. 1998); *In re Gordon*, 733 F.2d 900, 902, 221 USPQ 1125, 1127 (Fed. Cir. 1984)). "[T]he factual inquiry whether to combine references must be thorough and searching." *McGinley v. Franklin Sports, Inc.*, 262 F.3d 1339, 1351-52, 60 USPQ2d 1001, 1008 (Fed. Cir. 2001). "This factual question . . . [cannot] be

resolved on subjective belief and unknown authority." *In re Lee*, 277 F.3d 1338, 1343-44, 61 USPQ2d 1430, 1434 (Fed. Cir. 2002). "It must be based on objective evidence of record." *Id.* at 1343, 61 USPQ2d at 1434.

Here, Witchger "relates . . .to means and a method of attaching external current supply leads to an electrical coil." Col. 1, ll. 7-10. "FIG. 1 shows an electrical coil assembly 11 including many turns 12 of fine wire wound on a spool or bobbin having the shoulders 13 and 14 confining the wire coil between them. The ends of the wire are shown at 12A and 12B and a strip of tape 16 encircles the winding to keep the wire from unravelling." Col. 2, ll. 7-13. "Attachment of external electric supply lead wires to an electromagnetic coil assembly is done by a method using a harness base strip of resilient plastic insulating material having the two leads attached to the strip and the strip formed with a point and latching aperture portion for snapping onto the coil." Abs., ll. 1-6. "The leads are twisted to the coil wire ends, soldered and laid flat against the outer face of the strip. A tailend [sic] portion of the strip is then wrapped over the soldered joints with subsequent taping, if desired." *Id.* at ll. 6-10.

We share the appellant's concern that it is "not entirely clear as to how the [examiner] proposes to combine the two references . . . to produce the electric ballast as claimed. . . ." (Br. at 10.) Furthermore, we are uncertain how moving the two leads

from the harness base strip of Witchger to a shoulder 13 or 14 of the reference's bobbin would have "facilitat[ed] connections of the leads and placement of the cover." (Examiner's Answer at 5.) We will not "resort to speculation," *In re Warner*, 379 F.2d 1011, 1017, 154 USPQ 173, 178 (CCPA 1967), as to the examiner's position.


The examiner does not allege, let alone show, that the addition of Leach cures the aforementioned deficiency in combining Witchger and Sugiura. Absent a teaching or suggestion of a connection member for engaging an external electrical connector that is integrally formed with a flange of a bobbin, we are unpersuaded of a *prima facie* case of obviousness. Therefore, we reverse the obviousness rejections of claim 5 and of claims 3 and 4, which depend therefrom.

CONCLUSION

In summary, the rejection of claims 3-5 under 35 U.S.C. § 112, ¶ 2, is reversed. The rejections of the same claims under § 103(a) are likewise reversed.

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LANCE LEONARD BARRY

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Administrative Patent Judge

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